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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,783	11/18/2002	Fu-Chang Lin	DTCP0002USA	2417

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NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)

P.O. BOX 506

MERRIFIELD, VA 22116

EXAMINER

MADDEN, GREGORY VINCENT

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/065,783	Applicant(s) LIN, FU-CHANG	
	Examiner Gregory V. Madden	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 18 November 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>28-04-05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: On Page 3, Line 8, the word "if" was omitted between the word "matter" and "the".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088). The Hatakenaka reference teaches the digital camera (1) for generating device-dependent print data to a printer having a printer manager (3,4,8) for converting raw data into device-dependent print data and an I/O driver (32,33) for outputting the print data to the printer in Column 4, Lines 3-20 and Fig. 3. Hatakenaka fails to explicitly teach the camera having a housing with an opening at a front end for receiving incident light and a sensor installed at a rear end of the housing for detecting the incident light so as to generate raw data, but the Lee reference shows the housing (41), a front end opening for receiving incident light (43), and a sensor (45) at the rear end for detecting incident light in Column 2, Lines 38-42 and Fig. 3. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the digital camera with printer manager and I/O driver of Hatakenaka with the housing, front end opening, and sensor of Lee. One would have been motivated to do so because, as Hatakenaka shows in Column 1, Lines 21-24, it is

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advantageous to directly connect any digital camera with a printer (thus eliminating the need for an intermediate information processor), and the front end opening and rear end sensor of Lee allows for a thin camera housing, which is both space-saving and aesthetically pleasing.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088). As set forth above, the two references teach all of the limitations of Applicant's claim 1, and the Hatakenaka reference further goes on to show the encoder (4) for encoding the raw data into encoded data and a memory device (5) for storing the encoded data in Column 4, Lines 13-17 and Fig. 3.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088). Hatakenaka in view of Lee sets forth all of the limitations of claim 2 above, and Hatakenaka also shows the digital camera wherein the printer manager (3,4,8) decodes the encoded data to regenerate the raw data in Column 5, Lines 39-43 and Fig. 3.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088). Hatakenaka in view of Lee clearly teaches the limitations of Applicant's claim 1, and Hatakenaka further teaches a user interface (21-28) for controlling operations of the digital camera in Column 5, Lines 3-13 and Figs. 1 and 2.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088), further in view of Nakajima et al. (U.S. Pub. 2002/0135687). Hatakenaka in view of Lee teaches the limitations of Applicant's claim 2, but does not explicitly teach that the encoded data is stored in a JPEG format. Nakajima, however, does show the encoded data stored in the JPEG format on Page 4, Paragraph [0058]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the JPEG format of Nakajima with the digital camera of Hatakenaka in view of Lee. One would have been motivated to do so because, as

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Nakajima states on Page 4, Paragraph [0058], encoded data is typically stored in digital cameras using the JPEG format, therefore it would have been advantageous to use a well-known and compatible format in the encoder of Hatakenaka in view of Lee.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088), further in view of Nakajima et al. (U.S. Pub. 2002/0135687). As set forth above in the rejection to claim 3, Hatakenaka in view of Lee teaches the limitations of Applicant's claim 2, but does not explicitly teach that the encoded data is stored in a GIF format. Nakajima, however, teaches the encoded data of a digital camera apparatus being stored in a GIF format on Page 4, Paragraph [0058].

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088), further in view of Nakajima et al. (U.S. Pub. 2002/0135687). As set forth above in the rejection to claims 3, Hatakenaka in view of Lee teaches the limitations of Applicant's claim 2, but does not explicitly teach that the encoded data is stored in a BMP format. Nakajima, however, teaches the encoded data of a digital camera apparatus being stored in a BMP format on Page 4, Paragraph [0058].

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088), further in view of Nakajima et al. (U.S. Pub. 2002/0135687). As set forth above in the rejection to claims 3, Hatakenaka in view of Lee teaches the limitations of Applicant's claim 2, but does not explicitly teach that the encoded data is stored in a TIFF format. Nakajima, however, teaches the encoded data of a digital camera apparatus being stored in a TIFF format on Page 4, Paragraph [0058].

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088), further in view of Shiohara (U.S. Pat. 6,618,553).

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Hatakenaka in view of Lee sets forth all of the limitations of claim 1 above, but does not show the converter which converts raw data into gray-level image data and converts the gray-level image data into print data. The Shiohara reference does, however, show the raw data converter (221) converting the raw data to gray-level image data, which in turn is converted to print data in Column 10, Lines 6-16 and Fig. 11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the converter of Shiohara with the digital camera of Hatakenaka in view of Lee. One would have been motivated to do so because including this converter would allow the camera to process monochrome image data, as Shiohara shows in Column 10, Lines 6-12, which would enable the printer to print black-and-white renderings of an image.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakenaka et al. (U.S. Pat. 6,075,949) in view of Lee (U.S. Pat. 6,421,088), further in view of Shiohara (U.S. Pat. 6,618,553). Hatakenaka in view of Lee teaches the limitations of claim 1 above, but does not teach the converter which converts raw data into cyan-magenta-yellow-black (CMYK) image data and converts the CMYK image data into print data. The Shiohara reference, though, does teach the converter (221) which converts raw data into CMYK image data, which in turn is converted into print data in Column 10, Lines 18-22 and Fig. 11.

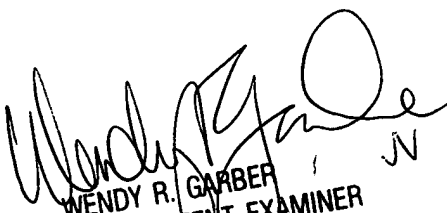
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory V. Madden whose telephone number is 571-272-8128. The examiner can normally be reached on Mon.-Fri. 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GVM


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